## TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

**BIOLOGY - 21** 

SPOKANE, WASHINGTON

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GUIDANCE FOR WILDLIFE FOOD PLOTS (HERBACEOUS \*)

USDA – NATURAL RESOURCES CONSERVATION SERVICE AND WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

Wildlife food plots can provide energy for wildlife during cold months when energy requirements are higher than summer, and seeds are not available elsewhere. Food plots may reduce mortality of wildlife. The combination of a 2-4 acre food plot planted near existing permanent woody cover provides forage and thermal cover through the winter. Keep in mind the value of a food source that stands up and is not buried during winter with heavy snowfall.

Planting guidelines apply primarily to corn, grain sorghum, and sorghum/sudan to be planted for pheasants and other upland birds. These plantings resemble cattail cover on upland sites and provide thermal cover as well. Planting short-season cereal grains that mature in 30 days or less are recommended. Sunflower, buckwheat, or millet may be added for diversity, making it more attractive to many wildlife species.

Soil temperature must be at least 55 degrees for proper germination of corn, grain sorghum, sorghum/sudan, and millet. Most years this will be late May to early June. Proper seeding by either no-till or cultivation is important for a successful crop. No-till seeding can be done following rain sufficient to wet a soil moisture front to one foot or more. Current growing vegetation needs to be controlled 2 weeks before seeding. For a cultivated seedbed, it should be disked, packed, fertilized according to a soil test, and pre-irrigated, if moisture is needed, prior to seeding. Planting in strips or blocks creates diversity across the field. It also allows you to plant taller crops on the windward side of the plot, which can control where the snow will drift. Planting on the windward side of the woody cover may also help snow depth. Weed control should be very selective. Control only the noxious weeks, and those that pose a threat to the success of the food crop. Some weeds may actually benefit wildlife, by providing shade, beneficial insects, and protein source.

Special considerations should be made for planting equipment which may be needed to achieve recommended row spacing and planting rates and/or crop height in relation to irrigation equipment, if needed. The amount of irrigation water should supplement the monthly precipitation to equal at least what is provided by rainfall in a 15-inch rainfall area.

Recommended seeding rates of pure live seed of selected crops for wetland and upland sites food sources are attached.

Once established, the Crop should be left standing through the winter; or at least until the first of March of the year following planting. Depending upon its condition, it may be left standing throughout the nesting season, then replanted in mid-June; if irrigated so there is adequate sub-moisture. If there is food remaining after one season, it should be left for another season. For crops that are left for two seasons, the site should be split and alternate planting from side to side each year.

\*Refer to Technical Note Biology #3, dated January 1976, for a listing of woody vegetation and their value as food for wildlife.

(Referenced from the Wildlife Habitat and Food Plot Guidelines, Gretchen Steele, et al; Washington Department of Fish and Wildlife, October 1998; and the Washington State Interagency Seeding Guide for Conservation and Forage Plantings, Miscellaneous Publication Number 58, Cooperative Extension and Washington State Rangeland Committee, 1980.)

## **Upland Sites**

Crop	Rate (lbs/acre)	Row Spacing (inches)	Estimated cost per lb
Field corn	15	20.36	.93
Sorghum	5	6-8	1.00
Sorghum/sudan	10	6-8	.30
Sunflower	5	20-36	1.30
Proso millet	20	6-8	.26
Buckwheat	50	6-8	.28
Cereal grains	60	6-18	.15
Sweet clover	4	6-8	.44
White clover	2	6-8	.90
Field peas	100	6-8	.15
Burnet	4	6-8	1.13
Hairy vetch	15	6-8	.98
Common vetch	30	6-8	.75
Millet, all	20	6-8	
Barnyard grass	20	6-8	
Sudan grass	4	6-8	

## **Wetland Sites**

Crop	Rate (lbs/acre)	Row Spacing (inches)	Estimated cost per lb
Cereal grains	60	6-8	.15
Alfalfa	4	6-8	3.00
White Clover	2	6-8	.90
Field peas	100	6-8	.15
Field corn	15	20-36	.93
Hairy vetch	15	6-8	.98
Common vetch	30	6-8	.75
Burnet	4	6-8	1.13
Sunflower	4	20-36	1.30
Millet, all	20	20	.26
Sorghum	30	6-8	1.00
Smartweed	10	6-8	
Alkali bulrush	30	6-8	8.25
Barnyard grass	20	6-8	
Potatoes	800	20-36	